Groundwater Protection and Water Wells Workgroup Meeting

Wednesday March 27, 2013
Hosted by the DEC
1st floor conference room 555 Cordova St. Anchorage with teleconference

Attendees in Anchorage:
Kathy Kastens (DEC-statewide), Chris Miller (DEC-DW Protection-statewide), Charley Palmer (DEC-DW Protection-statewide), Roy Robertson (DEC-DW Engineering-Mat-Su), Rebecca Baril (DEC-DW Protection-statewide), Fred Sorensen (UAF-CES-statewide), Jeff Ellison (Water Well Contractor - WWC), Wayne Westberg (WWC), Elizabeth Rensch (Certified Laboratory), Al Nagel (DOL&WD-statewide), Bill Kranich (PWS Owner - Southcentral).

Attendees via teleconference line:
Milo Pitner (WWC), Jim Munter (Hydrogeologist/Consultant), Larry Swihart (WWC), Lee Ice (WWC-Fairbanks), Barbara Roberts (PWS Owner - Kenai), Dan Brotherton (WWC), John Craven (PWS Owner-Fairbanks), Craig Seime (WWC).

Absentees:
Dave Bay Pump installer, Ted Schacle (WWC)

Meeting Minutes

Facilitator: Kathy Kastens (DEC)

Introduction

- Roll Call - all members in attendance listed above.
- About 5-10 minutes was spent introducing everyone to the WebEx conference software and its interactive capabilities and features, as well as ironing out some unexpected kinks.
- Kathy directed everyone to the list of issues and concerns ("Discussion Summary") compiled from the discussions held in October 2012.
- The group was asked for any suggestions as how to start or prioritize these issues.
    - Wayne Westberg stated that he thought the least intensive or controversial issues seem to be at the bottom of the list and in order to get started quickly, proposed the group start at the bottom of the list and move up (or to the front of the document).
    - A vote was taken. All group members were in agreement.
- First Issue: (technically last issues on the document - under the "Miscellaneous" category) "Access to septic system locations is limited and difficult to obtain".

- Chris Miller-indicated that the DWP database has location data that is used to show the density of septic systems based on tax parcels (those that don't have sewer lines). All septic locations are estimated to be at the center of parcels supplied by boroughs and are therefore limited by the tax parcel information.
    - Clarification that the data is used from more of a risk assessment, rather than a separation distance, standpoint.
- It was mentioned that all this information is technically available through as-builts that are completed for the development of any property. It was then asked whether the problem was just a lack of resources and funding since it is assumed that most of the as-builts are on paper and not digital.
    - Chris-agreed that it would be a major hurdle trying to obtain and convert the as-builts and paper files into something usable.
- Bill- stated it was really two issues: 1) concern of prospective well owner knowing where the septic is and being able to measure the distance with a tape, but that a database may not be much help; and 2) concern of septic system density in an area relative to area-wide potential contamination like nitrates, but this data is available with DEC Source Water Assessment (SWA) reports.

  It was asked if this issue was in relation to PWS sources. It was also asked whether it was a Public Water System (PWS) concern or whether it was a private homeowner concern.

    - It was recalled that it was a concern at one point brought up by a private homeowner, but is also a prevalent concern with PWS sources.
- Drillers brought up that they always measure the distance with a tape instead of relying on a digital map, and when measuring separation distance, they sometimes/often add 10-20 feet to ensure a safe distance from a septic system.
    - John Craven (PWS Owner) brought up the issue that there is a septic system put in near his PWS well that he personally measured to be under the 200' required minimum separation distance (184'), but installer indicated 200', so online logs have 200'. He added that although other surrounding septic systems may meet the separation distance they still may pose a threat due to the density surrounding the PWS well.
    - DEC stated that the density of septic systems can increase PWS susceptibility and risk rankings in the Source Water Assessment (SWA) and affect the sampling frequency for that PWS.
- It was stated that the Planning Authority is the one that needs to make sure that the lot sizes are large enough so that separation distances can be met. He felt that all of this was already in place, so cleaning up the available data on an area-wide basis may be the only thing that could really be done.
- Fairbanks stated that site surveys are always needed especially for PWS sources, which require engineers. Never going to be able to replace the need to be onsite, so need to

keep this practical. Certified Installers submit records to DEC, not the Boroughs. The state should have these records.

- **Chris-DEC-DWP stated that this should be correct and that we can research this further.**

- Jim Munter- added that this is an example of why the group may want to develop criteria for when action by the workgroup should occur. Following are his proposed criteria:
  1. If action is needed to protect groundwater or public health;
  2. The action is economically sustainable; and
  3. A statewide need for action.
- Jim reiterated that our mission is to prioritize the issue and nothing compelling is being brought forward that indicates a need to do anything different than what is currently in place. **Proposed moving on to another issue.**
- Kathy-DEC summarized that no action by the workgroup is needed on this issue at this time, except by Chris-DEC-DWP.
  - **Action item(s):**
    - **One action item was derived from this discussion which was that DWP will talk to the DEC Division of Water (DOW) (who regulate wastewater systems) to gain a better understanding of their inventory of as-built information and if it is being catalogued in a spatial (map) format (i.e. GIS). Results will be reported back to the workgroup.**
    - it was motioned that the issue had been addressed by the group,however if it comes up again and still needs to be addressed that it could be re-opened for discussion at a later time.

- Next Issue: "Identifying areas with water quality/quantity issues as well as identified contaminant sites is not broadly known".
  - Field of View Subdivision in the Mat-Su Valley was brough upas an example to clarify the quantity issue to be discussed
  - Wayne- stated that the MOA, approval of a subdivision is based in part on approval of the water supply.
    - Roy stated that this is not the same for Mat-Su and that a subdivision can be approved prior to approval to construct a PWS source.
    - Not all agreed that this was true.
  - Bill felt that this was an area where DEC has been failing. He stated that there used to be a requirement for extensive pumping tests, and that DEC has the authority to ensure that the PWS can supply its customers before it is approved.
  - It was mentioned at one point DEC reviewed subdivision applications, but not anymore. Chris stated that the DEC Subdivision Plan Approval authority has been removed [several years ago]. The authority is at the local level now.

- It was pointed out that there should be some entity stopping subdivisions from being developed if enough water (e.g. from a PWS well) is not available, and that there are a few subdivisions for this example. In the past the DEC implemented a requirement for extensive pumping tests and that this hasn't been happening as of late.
    - Roy from the DEC stated that currently the Mat-Su Borough does not require any proof for developing a subdivision.
- Discussion arose as to whether this was more of a "Buyer Beware" situation, and that the developer should be the one responsible to do research and possibly have wells drilled for testing before the property is even purchased. Should the responsibility be put on the developer alone? Should the conversation be between the driller and the developer?
    - The example arose that the Field of View Subdivision (before it was purchased by the current owner) had another potential buyer who drilled two wells before purchase and wasn't able to find water and therefore decided against buying. The current owner drilled many wells, finally found a little water, then purchased.
    - A comment from the Kathy (DEC) was that this should possibly be something that we advise the platting and zoning portions of local government to take on. Ask them to consider some standards for subdivision development.
    - Drillers in Fairbanks brought up that in their region, the conditions for water resources are greatly variable. In one well there will be very little water but 20' feet away will be a well producing at a good rate. To make a general disclaimer that "there is no water" is very inaccurate.
    - DEC agreed that they understood but without hydrologic data, it is hard to move forward without making some generalizations.
    - It was brought up that the standards for some of the hydrologic reporting could be a discussion for future issues that deal with standards.
- The question as to whether there were any suggestions as to how to educate developers and the public (particularly in the Mat-Su) was posed. Also noted was that there are some instances where the developer is long gone before the DEC even gets to the well.
- Jim Munter brought up that there are quite a few (populated) areas that do in fact have hydrologic data/reports. A possible solution is to propose/request more studies be done. He also pointed out that there is contaminated sites data for the public maintained by DEC, and maybe this data just needs to be publicized more and made more user-friendly.
- It was agreed by many that there isn't enough funding, resources, or current available knowledge to predict potential outcomes in areas, by either quality or quantity of water.
- The discussion then turned to the example of Anchorage's requirements as far as subdivision development.
    - Currently, they require that the developer drill a well for test data, then hire hydrologists to analyze results.

        - It was pointed out that requirements in anchorage were started due to some very controversial issues that arose, and that the platting board had no tools at their disposal to resolve the issue.
            - Some of the stakeholders agreed that this is a good system to have in place.
            - Others thought that there is too much unpredictability and that from a business standpoint, drilling a well first can bring down the value of a lot/subdivision.
    - The clarification was made that these discussions are for both PWS and private wells.
    - It was mentioned that the possible bottom line is that platting authorities need more education. The DEC should have standards for requiring adequate yield for approval, and that DEC and DNR should make water quality and quantity assessments easily available.
    - Fred Sorensen pointed out that quantity has been well discussed but what about quality. He posed the question to Elizabeth Rensch of Analytica as to whether they do or have the capabilities to measure any sort of spatial trend on samples they analyze.
        - Elizabeth responded that in short, no they do not measure trends. She further responded that by regulation of the DEC, PWSs are required to do baseline tests before they are approved, but there is nothing like that for private.
        - Fred expanded the question as to whether there is no information available to the public then for them to be informed if nearby wells tend to have high arsenic concentrations?
        - Dan Brotherton mentioned that there is a wealth of resources at the UAF cooperative extensions website.
        - Jim Munter mentioned that the Municipality of Anchorage has the quality information available online as far as nitrates and a few other contaminants.
        - This point was taken that this then may be a good point in favor of test wells for populated areas outside of the municipality.
        - It was agreed that there is no set process or consistent way statewide on what steps need to be taken (or in what order) when developing land.
    - At this point Kathy summarized what has been discussed so far to be put to an agreement vote: There needs to be more broadbase education in a different multi-prong approach. Boroughs need to be educated and implement some better standards for subdivision development. Some information should be available as to what to do before purchasing. So borough first, then possibly a Best Management Practices (BMP) for Developers and Contractors, then educational documents for private homeowners and PWS owners/developers. Any educational material and/or letters of recommendations to local governments should go out under the workgroups approval (and signature). This should include enough information and resources for buyers to do their own research and set-up a semi “Buyer beware” system. There needs to be some interaction with boroughs and planning and zoning portions of local government to bring attention to these needs.

        - The approval process needs to be improved – was added to this summary.
        - A discussion was brought up that the water rights application and cooperation with the DEC could be strengthened.
            - Charley commented that currently the permit application for a PWS just asks whether they have applied for water right with a receipt of application, nothing showing that they have actually received the water right. There has been a few times where it has been shown that the DEC's engineering is able to process the PWS permits faster than the DNR can process the water rights.
            - The DEC/DWPP agreed to compile the water rights process from the DNR for public wells.
        - The clarification was made, following a question on whether we are directly resolving the issue, that we don't have the funding or the resources to perform the sort of hydrologic research and testing to solve this problem, so our closest step to solve this is an educational track with an advisement component for local governments.
        - Discussion also arose as to the availability (and ease of access) of educational materials for a private homeowner buying a piece of property with or without a well.
        - A vote was taken with a majority in agreement (A few objections were made by Dan Brotherton and Lee Ice of Fairbanks).
    - **Actions Items for this issue:**
        - Dan Brotherton: To send out educational links he is aware of (as of 3/28/2013 – we at the DEC have received these links and will send them out once compiled).
        - As a group, compiling and distributing some educational items. Format and information to be included will be decided by workgroup through email correspondence between now and the next meeting.
    - Clarification was made that the target audience for the educational documents are private (looking to purchase), developers, PWSs, boroughs, and homeowners with wells.
    - DEC also agreed to start surveying local governments for their current standards/requirements for land development (as it pertains to drinking water wells).
- Next Meeting:
    - The conversation then was directed to scheduling of the next meeting to be held.
    - Well Drillers were asked what their preferences were as they are heading into peak season.
        - Every other week was proposed but was not in the general favor (for future reference).
        - Larry reminded the group that at the last meeting a tentative agreement of meetings once a month was reached.
        - Mid-April was then proposed and seemed to be in general favor. April 24th was in a greater agreement than the 17th, same time.

        - Vote was taken with a majority (if not unanimous) agreement.
    - Chris commented that he is currently working on putting together a Sharepoint Site for the workgroup that will allow for an easier platform for sharing documents and ideas.
    - The DEC is also currently in the process of sending out and collecting responses from other State's entities as to what their current solutions are to similar issues that we are addressing. The deadline is currently set at April 9th, so we should have that resource available at the next meeting.

REMINDER: Next meeting is Wednesday April 24th, 2013 6:00pm – 8:00pm